## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Daniel I. Kerpelman et al. § Group Art Unit: 2768 88888888 Serial No.: 09/470,344 Confirmation No.: 6033 Filed: December 22, 1999 Examiner: Morgan, Robert W. For: MEDICAL FACILITY Atty. Docket: GEMS:0065/YOD 15SV5373-4 COMMUNICATIONS **TOPOLOGY** 

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September 24, 2007	/Patrick S. Yoder/
Date	Patrick S. Yoder

## APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance to the Notice of Appeal mailed on September 14, 2007 (on even date with this Brief).

The Commissioner is requested to apply the Appeal Brief fee of \$500.00 previously paid on March 22, 2007 to the present Brief.

## 1. **REAL PARTY IN INTEREST**

The real party in interest is General Electric Company, the Assignee of the above-referenced application by virtue of the Assignment recorded at reel 010690, frame 0086, and recorded on March 20, 2000. General Electric Company, as Assignee, will be directly affected by the Board's decision in the pending appeal.

## 2. **RELATED APPEALS AND INTERFERENCES**

A decision on the present application was appealed on January 27, 2003, followed by an eventual decision of the Board, reversing the Examiner, mailed by the Office on October 26, 2005. The undersigned is Appellants' legal representative in this Appeal.

## 3. <u>STATUS OF CLAIMS</u>

Claims 1-3 and 5-60 are currently pending and currently under final rejection and, thus, are the subject of this appeal.

### 4. <u>STATUS OF AMENDMENTS</u>

All amendments in relation to the claims of the present patent application have been entered, and no amendments have been submitted or entered subsequent to the Final Office Action mailed on October 19, 2006.

### 5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to information infrastructures for hospitals, clinics, and other medical institutions. *See* Application, page 1, lines 5-10. More particularly, the invention relates to a technique for exchanging information within a medical facility via an improved topology linking various equipment and networks into a data exchange infrastructure. *See id.* The technique offers rapid and effective data exchange within the institution, and facilitates transmission of data to a remote service provider, and routing of data from such a service provider to designated diagnostic systems of the institution. *See id.* at page 3, line 20 through page 4, line 6. The technique

may be equally well applied to existing facilities having partial or fully networked environments, and to institutions upgraded to offer such networking capabilities. *See id.* 

In accordance with the technique, a plurality of client diagnostic systems is connected to an internal network of the institution. See id. A data communications control system permits data from the systems to be accessed via the internal network. See id. The data may include service requests, requests for programs and software, requests for documentation and training materials, and so forth. See id. The data is then transmitted to a remote service provider as needed, through a reduced number of connections and data transmission sessions. See id. Data from the remote service provider is received by the control system and is distributed to designated diagnostic systems as desired. See id. The technique offers enhanced connectivity, facilitates data access and transfer, and provides for improved interconnectivity of devices and systems of the institution. See id.

The Application contains five independent claims, namely, claims 1, 17, 32, 46, and 55, all of which are the subject of this Appeal. The subject matter of these five claims is summarized below. Further, the subject matter of dependent claims 10, 13, 16, 18, 26, 29, 31, 34, 42, 43, 45, 49, 52, and 58 is also summarized.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to medical facility data communications system (*e.g.*, 10). *See*, *e.g.*, *id.* at page 5, lines 7-17; *see also*, FIG. 1. The system (*e.g.*, 10) includes an internal data communications network (*e.g.*, 20), a plurality of clients (*e.g.*, 24), and a data communications control system (*e.g.*, 40). *See*, *e.g.*, *id.* at page 5, lines 19-28; *see also*, page 7, line 20 through page 8, line 2; *see also*, page 10, line 8 through page 11, line 18; *see also*, FIGs. 1-2. The plurality of clients (*e.g.*, 24) are coupled to the internal network (*e.g.*, 20) and uniquely addressed on the internal network

(e.g., 20). See, e.g., id. at page 5, lines 19-28; see also, FIG. 1. The clients (e.g., 24) include a plurality of medical diagnostic imaging modalities (e.g., 26, 28, 30, 32) configured to produce image data. See, e.g., id. at page 6, lines 8-19; see also, FIG. 1. Further, the data communications control system (e.g., 40) is coupled to the internal network (e.g., 20) for receiving client data from the clients (e.g., 24), transmitting client data to a remote service provider (e.g., 14), receiving addressed data from the remote service provider (e.g., 14), and distributing the addressed data to the clients (e.g., 24). See, e.g., id. at page 5, lines 7-17; see also, page 7, line 20 through page 8, line 2; see also, page 10, line 8 through page 11, line 18; see also, FIGs. 1-3.

With regard to the aspect of the invention set forth in independent claim 17, discussions of the recited features of claim 17 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a data communications system (e.g., 10) for a medical diagnostic facility. See, e.g., id. at page 5, lines 7-17; see also, FIG. 1. The system (e.g., 10) includes a plurality of clients (e.g., 24), a data communications control system (e.g., 40), and an external network interface (e.g., 88). See, e.g., id. at page 5, lines 19-28; see also, page 7, line 20 through page 8, line 2; see also, page 10, line 8 through page 11, line 18; see also, FIGs. 1-2. The plurality of clients (e.g., 24) are linked to an internal network (e.g., 20) and include a plurality of medical diagnostic imaging modalities (e.g., 26, 28, 30, 32). See, e.g., id. at page 5, lines 19-28; see also page 6, lines 8-19; see also, FIG. 1. Further, the data communications control system (e.g., 40) is linked to the internal network (e.g., 20) for receiving client data from the clients (e.g., 24), distributing addressed data to the clients (e.g., 24), transmitting client data to a remote service provider (e.g., 14) and receiving addressed data from the remote service provider (e.g., 14). See, e.g., id. at page 5, lines 7-17; see also, page 7, line 20 through page 8, line 2; see also, page 10, line 8 through page 11, line 18; see also, FIGs. 1-3. The external network interface (e.g., 88) is coupled to the data communications control system (e.g., 40) for transmitting the client data to the remote service provider (e.g., 14)

and for receiving the addressed data from the remote service provider (*e.g.*, 14). *See*, *e.g.*, *id*. at page 10, lines 8-22; *see also*, FIGs. 1-3.

With regard to the aspect of the invention set forth in independent claim 32, discussions of the recited features of claim 32 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a communications system (e.g., 10) for a medical diagnostic facility. See, e.g., id. at page 5, lines 7-17; see also, FIG. 1. The system (e.g., 10) includes an internal network (e.g., 20), a plurality of clients (e.g., 24), and a data communication control system (e.g., 40). See, e.g., id. at page 5, lines 19-28; see also, page 7, line 20 through page 8, line 2; see also, page 10, line 8 through page 11, line 18; see also, FIGs. 1-2. The plurality of clients (e.g., 24) are configured for connection to the network (e.g., 20) for transmission of client data and for receipt of addressed data. See, e.g., id. at page 5, lines 19-28; see also, FIG. 1. The clients include a physically mobile client (e.g., 24) and a plurality of medical diagnostic imaging modalities (e.g., 26, 28, 30, 32). See, e.g., id. at page 6, lines 8-19; see also, FIG. 1. Further, the data communication control system (e.g., 40) is coupled to the internal network (e.g., 20) and to an external network (e.g., 60) for communicating client data and addressed data between the clients (e.g., 24) and a remote service provider (e.g., 14). See, e.g., id. at page 5, lines 7-17; see also, page 7, line 20 through page 8, line 2; see also, page 10, line 8 through page 11, line 18; see also, FIGs. 1-3. Additionally, the data communications control system (e.g., 40) is configured to automatically access client data including data indicative of a location of the mobile client (e.g., 24). See, e.g., id. at page 11, lines 7-18; see also, page 12, line 30 through page 13, line 7; see also, page 20, lines 7-19.

With regard to the aspect of the invention set forth in independent claim 46, discussions of the recited features of claim 46 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method for communicating data in a

medical diagnostic facility (*e.g.*, 10). *See*, *e.g.*, *id.* at page 14, lines 26-27. The method includes transmitting client data (*e.g.*, Block 204) from a plurality of networked clients (*e.g.*, 24) to a data communications control system (*e.g.*, 40) via an internal network (*e.g.*, 20). *See*, *e.g.*, *id.* at page 5, lines 19-28; *see also*, page 7, line 20 through page 8, line 2; *see also*, page 10, line 8 through page 11, line 18; *see also*, page 14, line 26 through page 16, line 12; *see also*; FIGs. 1-4. The clients include a plurality of medical diagnostic modalities (*e.g.*, 26, 28, 30, 32). *See*, *e.g.*, *id.* at page 6, lines 8-19; *see also*, FIG. 1. Further, the method includes processing the client data (*e.g.*, Blocks 206, 210, 212, 214) in the data communications control system (*e.g.*, 40) and transmitting at least a portion of the client data (*e.g.*, Block 216) from the data communications control system (*e.g.*, 40) to a remote service provider (*e.g.*, 14) via an external network (*e.g.*, 60). *See*, *e.g.*, *id.* at page 5, lines 7-17; *see also*, page 7, line 20 through page 8, line 2; *see also*, page 10, line 8 through page 11, line 18; *see also*, page 14, line 26 through page 16, line 12; *see also*, FIGs. 1-4.

With regard to the aspect of the invention set forth in independent claim 55, discussions of the recited features of claim 55 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a method for managing data communications in a medical diagnostic facility (*e.g.*, 10). *See*, *e.g.*, *id.* at page 16, lines 13-15; *see also*, page 19, line 24 through page 20, line 5; *see also* FIGs. 4-8. The method includes coupling a plurality of clients (*e.g.*, 24) to an internal network (*e.g.*, 20). *See*, *e.g.*, *id.* at page 5, lines 19-28; *see also*, FIG. 1. The clients (*e.g.*, 24) include at least one physically mobile client and a plurality of medical diagnostic imaging modalities (*e.g.*, 26, 28, 30, 32). *See*, *e.g.*, *id.* at page 6, lines 8-19; *see also*, FIG. 1. Further, the method includes transmitting (*e.g.*, Block 302, 406) client data from the clients (*e.g.*, 24) to a data communications control system (*e.g.*, 40). *See*, *e.g.*, *id.* at page 5, lines 7-17; *see also*, page 7, line 20 through page 8, line 2; *see also*, page 10, line 8 through page 11, line 18; *see also*, page 18, lines 22-32; *see also*, page 20, lines 7-19; *see also*, FIGs. 1-3, 6, 8. The client data includes at least data indicative of a location of the at least one mobile client.

See, e.g., id. at page 11, lines 7-18; see also, page 12, line 30 through page 13, line 7. The method further includes storing the client data (e.g., Block 410). See, e.g., id. at page 20, lines 18-19; see also, FIG. 8.

With regard to the aspect of the invention set forth in dependent claim 10, discussions of the recited features of claim 10 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claims 1 and 9, where the data communications control system (*e.g.*, 40) is configured to access data from networked clients (*e.g.*, 24) in accordance with a predetermined data acquisition routine and the data accessed includes operational parameters of the clients (*e.g.*, 24). See, e.g., id. at page 11, lines 20-32; see also, page 14, line 26 through page 15, line 10.

With regard to the aspect of the invention set forth in dependent claim 13, discussions of the recited features of claim 13 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 1, where the data communications control system (*e.g.*, 40) includes an operator interface (*e.g.*, 98, 100, 102, 104). *See*, *e.g.*, *id.* at page 11, lines 2-5; *see also*, FIG. 2. Further, the system (*e.g.*, 40) is configured to access data from networked clients (*e.g.*, 24) in response to an operator request input via the operator interface (*e.g.*, 98, 100, 102, 104). *See id.* 

With regard to the aspect of the invention set forth in dependent claim 16, discussions of the recited features of claim 16 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 1, where all data communications between selected clients (*e.g.*, 24) and the remote service provider (*e.g.*, 14) are routed through the data communications control system (*e.g.*, 40). *See*, *e.g.*, *id.* at page 8, lines 4-13; *see also*, FIGs. 1-3.

With regard to the aspect of the invention set forth in dependent claim 18, discussions of the recited features of claim 18 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 17, where the client data includes operational data for evaluating performance of the plurality of medical diagnostic imaging modalities (e.g., 26, 28, 30, 32). See, e.g., id. at page 6, lines 8-19; see also page 11, lines 20-32; see also, page 14, line 26 through page 15, line 10; see also, FIG. 1.

With regard to the aspect of the invention set forth in dependent claim 26, discussions of the recited features of claim 26 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claims 17 and 25, where the data communications control system (*e.g.*, 40) is configured to access data from networked clients (*e.g.*, 24) in accordance with a predetermined data acquisition routine and the data accessed includes operational parameters of the clients (*e.g.*, 24). See, e.g., id. at page 11, lines 20-32; see also, page 14, line 26 through page 15, line 10.

With regard to the aspect of the invention set forth in dependent claim 29, discussions of the recited features of claim 29 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 17, where the data communications control system (*e.g.*, 40) includes an operator interface (*e.g.*, 98, 100, 102, 104). *See*, *e.g.*, *id.* at page 11, lines 2-5; *see also*, FIG. 2. Further, the system (*e.g.*, 40) is configured to access data from networked clients (*e.g.*, 24) in response to an operator request input via the operator interface (*e.g.*, 98, 100, 102, 104). *See id.* 

With regard to the aspect of the invention set forth in dependent claim 31, discussions of the recited features of claim 30 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in

accordance with the present invention relates to the system, as set forth in claims 17 and 30, where the data communications control system (*e.g.*, 40) is configured to store (*e.g.*, 92) and execute (*e.g.*, 86) communications interface routines interactively with the clients (*e.g.*, 24). See, e.g., id. at page 10, lines 8-32; see also, FIG. 2. Further, the communications interface routines include a web browser routine. See, e.g., id. at page 12, line 16-28.

With regard to the aspect of the invention set forth in dependent claim 34, discussions of the recited features of claim 34 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 32 where the client data includes operational data for evaluating performance of the plurality of medical diagnostic imaging modalities (e.g., 26, 28, 30, 32). See, e.g., id. at page 6, lines 8-19; see also, page 11, lines 20-32; see also, page 14, line 26 through page 15, line 10; see also, FIG. 1.

With regard to the aspect of the invention set forth in dependent claim 42, discussions of the recited features of claim 42 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claims 32 and 41, where the data communications control system (*e.g.*, 40) is configured to access data from networked clients (*e.g.*, 24) in accordance with a predetermined data acquisition routine and the data accessed includes operational parameters of the clients (*e.g.*, 24). See, e.g., id. at page 11, lines 20-32; see also, page 14, line 26 through page 15, line 10.

With regard to the aspect of the invention set forth in dependent claim 43, discussions of the recited features of claim 43 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 32, where the data communications control system (*e.g.*, 40) includes an operator interface (*e.g.*, 98,

100, 102, 104). See, e.g., id. at page 11, lines 2-5; see also, FIG. 2. Further, the system (e.g., 40) is configured to access data from networked clients (e.g., 24) in response to an operator request input via the operator interface (e.g., 98, 100, 102, 104). See id.

With regard to the aspect of the invention set forth in dependent claim 45, discussions of the recited features of claim 45 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claims 32 and 44, where the data communications control system (*e.g.*, 40) is configured to store (*e.g.*, 92) and execute (*e.g.*, 86) communications interface routines interactively with the clients (*e.g.*, 24). See, e.g., id. at page 10, lines 8-32; see also, FIG. 2. Further, the communications interface routines include a web browser routine. See, e.g., id. at page 12, line 16-28.

With regard to the aspect of the invention set forth in dependent claim 49, discussions of the recited features of claim 49 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claims 46 and 48, where the client data is transmitted to the data communications control system (*e.g.*, 40) in response to a request from the control system (*e.g.*, 40). *See*, *e.g.*, *id.* at page 20, lines 7-19; *see also*, FIG. 8. Additionally, the control system (*e.g.*, 40) includes an operator interface (*e.g.*, 98, 100, 102, 104). *See*, *e.g.*, *id.* at page 11, lines 2-5; *see also*, FIG. 2. Further, the request is generated via the operator interface (*e.g.*, 98, 100, 102, 104). *See id.* 

With regard to the aspect of the invention set forth in dependent claim 58, discussions of the recited features of claim 58 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to the system, as set forth in claim 55 where the control system (*e.g.*, 40) includes an operator interface (*e.g.*, 98, 100, 102, 104). *See*,

e.g., id. at page 11, lines 2-5; see also, FIGs. 1-2. Further, client data is accessed via the internal network (e.g., 20) in response to operator intervention via the interface (e.g., 98, 100, 102, 104). See id.

## 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL Sole Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's sole ground of rejection in which the Examiner rejected claims 1-3 and 5-60 under U.S.C. § 103(a) as being unpatentable over DiRienzo (U.S. Patent No. 6,006,191, hereinafter "DiRienzo").

## 7. **ARGUMENT**

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under 35 U.S.C. § 103. Accordingly, Appellants respectfully requests full and favorable consideration by the Board, and reversal of the outstanding rejections. Appellants strongly believe that claims 1-3 and 5-60 are currently in condition for allowance.

## A. <u>Legal Precedent</u>

First, the pending claims must be given an interpretation that is reasonable and consistent with the *specification*. *See In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969) (emphasis added); *see also In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Indeed, the specification is "the primary basis for construing the claims." *See Phillips v. AWH Corp.*, No. 03-1269, -1286, at 13-16 (Fed. Cir. July 12, 2005) (*en banc*). One should rely *heavily* on the written description for guidance as to the meaning of the claims. *See id* (emphasis added). Further, when the specification states the meaning that a term in the claim is intended to have, the claim is examined using that meaning, in order to achieve a complete exploration of the applicant's invention and its relation to the

prior art. *See In re Zletz*, 893 F.2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989). Finally, it is not only permissible, but often desirable, to use new terms that are frequently more precise in describing and defining the new invention. *See In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970). Additionally, the meaning of a particular claim term may be defined by implication, that is, according to the usage of the term in the context in the specification. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) (*en banc*).

Second, interpretation of the claims must also be consistent with the interpretation that *one of ordinary skill in the art* would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111. "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *See Collegenet, Inc. v. ApplyYourself, Inc.*, No. 04-1202, -1222, 1251, at 8-9 (Fed. Cir. August 2, 2005) (quoting *Phillips*, No. 03-1269, -1286, at 16). The Federal Circuit has made clear that derivation of a claim term must be based on "usage in the ordinary and accustomed meaning of the words amongst artisans of ordinary skill in the relevant art." *See id.* 

## B. <u>Independent Claims 1, 17, 32, 46, and 55</u>

Independent claims 1, 17, 32, 46, and 55 recite "a plurality of medical diagnostic imaging modalities" and "a data communications control system." Appellants would like to reiterate that DiRienzo fails to disclose *all* of these claimed elements. *See* Response to Office Action mailed May 2, 2006, pg. 15. Moreover, DiRienzo fails to suggest or render obvious to one of ordinary skill in the art these recited elements. *See id.* at 18.

Appellants respectfully submit that the Examiner failed to offer any <u>objective</u> <u>evidence</u> in support of the conclusory statements made in the rejection. Additionally, Appellants further believe that not only did the Examiner mischaracterize the teachings of DiRienzo, but also interpreted the recited claim language in a manner that is inconsistent with the specification. Further, Appellants assert that in making the rejection the

Examiner resorted to speculation based on unfounded assumptions and used hindsight reconstruction to pick and choose what appears to be disclosed in DiRienzo, and what might have been obvious to one of ordinary skill in the art. Appellants believe that the following discussion will clearly illustrate the flaws in the Examiner's analysis and further demonstrate that the rejection was based purely on the Examiner's <u>subjective</u> <u>doubt</u> about the patentability of the invention.

## 1. DiRienzo does not teach or suggest a plurality of medical diagnostic imaging modalities coupled on an internal network.

Independent claims 1, 17, 32, 46, and 55 recite, in generally similar language, a plurality of clients coupled to and uniquely addressed on an internal network, where the clients include *a plurality of medical diagnostic imaging modalities*. In making the rejection of these claims, the Examiner stated that diagnostic instrumentalities produce "diagnostic medical images." *See*, *e.g.*, Final Office Action mailed Oct. 19, 2006, pg. 3. The Examiner then made the unreasonable and irrational leap that a computer is equivalent to a medical diagnostic imaging modality simply because it is connected to a network in a physician's office. *See id*.

Appellants agree that medical diagnostic imaging modalities produce medical images. However, as is evidenced by the Examiner's own cite to the reference, DiRienzo fails to teach or suggest a plurality of medical diagnostic imaging modalities coupled to and uniquely addressed on an internal network. *See* Final Office Action mailed Oct. 19, 2006, pg. 3 (citing DiRienzo, col. 5, lines 13-25). Instead, DiRienzo only addresses the *acquisition of images* from health care facilities and by no means discloses a network of medical diagnostic imaging modalities. Indeed, one means for the *image acquisition* taught by DiRienzo is placing the image on a compact disc (CD) or digital video disk (DVD) and delivering it from one work station to another via a courier service. *See* DiRienzo, col. 19, lines 20-24. Acquiring an image from a CD or DVD delivered via courier clearly does not relate to or disclose an internal network of medical diagnostic imaging modalities. Thus, DiRienzo only relates to the *images* themselves and by no

means suggest an internal network of medical diagnostic imaging modalities. Stating the truism that medical diagnostic imaging modalities produce medical images does not provide the necessary <u>objective evidence</u> required to support a *prima facie* case of obviousness.

Additionally, Appellants respectfully submit that the Examiner mischaracterized the teachings of DiRienzo in order to avoid the recited element of a plurality of medical <u>diagnostic imaging modalities</u> coupled to an internal network. Specifically, the only networked clients disclosed by DiRienzo is a scanning computer (310, FIG. 3), a clearing house computer (200, FIG. 3), a graphics workstation (410, FIG. 3), and a gatekeeper's computer (510, FIG.3), none of which teach or suggest a medical diagnostic imaging modality. See, DiRienzo, col. 18, lines 48-52; see also, col. 19, lines 43-67. Further, the present application specifically discloses magnetic resonance imaging (MRI) systems (26, FIG. 1), a computed tomography (CT) systems (28, FIG. 1), an x-ray systems (30, FIG. 1), and an ultrasound systems (32, FIG. 1) as exemplary embodiments of medical diagnostic imaging modalities. See Application, page 6, lines 8-19. Indeed, these are the types of system that one of ordinary skill in the art would understand to be representative of a medical diagnostic imaging modality. Likewise, none of the computers disclosed in DiRienzo teach or suggest any of these medical imaging modalities. Instead, DiRienzo discloses computers that either scan in previously generated medical images or are capable of storing and/or viewing previously generated medical images. Moreover, one of ordinary skill in the art would not interpret any of these computers as equivalent to or suggestive of a medical diagnostic imaging modality.

In summary, Appellants respectfully submit that the Examiner mischaracterized the teaching of DiRienzo in making the rejection of these independent claims. Specifically, one of ordinary skill in the art would not equate a complex medical diagnostic imaging modality to a computer. Therefore, not only does DiRienzo fail to disclose *all* of the claimed elements, but also fails to suggest or teach *all* of the claimed elements. Accordingly, Appellants respectfully assert that the Examiner has failed to

establish a *prima facie* case of obviousness for independent claims 1, 17, 32, 46, and 55, as well as the claims that depend therefrom.

## 2. DiRienzo does not teach or suggest the recited data communications control system.

Independent claims 1, 17, 32, 46, and 55 recite a data communications control system ("DCCS") element. Specifically, claim 1 recites "a data communications control system coupled to an internal network for receiving client data from the clients, transmitting client data to a remote service provider, receiving addressed data from the remote service provider, and distributing the addressed data to the clients." Claim 17 recites, "a data communications control system linked to the internal network for receiving client data from the clients, distributing addressed data to the clients, transmitting client data to a remote service provider and receiving addressed data from the remote service provider." Claim 32 recites, "a data communication control system coupled to the internal network and to an external network for communicating client data and addressed data between the clients and a remote service provider, the data communications control system being configured to automatically access client data including data indicative of a location of the mobile client." Claim 46 recites, "transmitting client data from a plurality of networked clients to <u>a data communications</u>" control system via an internal network,...processing the client data in the data communications control system;...transmitting at least a portion of the client data from the data communications control system to a remote service provider via an external network." Claim 55 recites, "coupling a plurality of clients to an internal network,...transmitting client data from the clients to <u>a data communications control</u> system, the client data including at least data indicative of a location of the at least one mobile client; and...storing the client data."

The Examiner did not deny that DiRienzo fails to explicitly disclose the claimed data communication control system. *See* Final Office Action mailed Oct. 19, 2006, pg. 3.

Thus, in making the rejection of these independent claims the Examiner relied on the following unsupported and conclusory statement:

DiRienzo fails to explicitly teach the claimed data communications control system linked to the internal network.

However, DiRienzo teaches the transmission of data between the medical diagnostic facility and the CHC (i.e. the remote provider) via a network requires the use of a network/communication interface (e.g. the recited data communication control system), and thus obviates the step of providing a data communications control system coupled to the internal network. Furthermore, at the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to include network/communication interface (e.g. the recited data communication control system) within the data transmission as taught by DiRienzo with the motivation of assisting in the transmission process by facilitating the reliability of physician accessing and reviewing patient data.

Final Office Action mailed Oct. 19, 2006, pg. 3.

In other words, according to the Examiner, because DiRienzo fails to disclose the DCCS, it must be obvious. Not only is this an unsupported and conclusory statement, but it is also a completely unreasonable interpretation of the teachings of DiRienzo and the recited claim language. Moreover, this statement falls well short of a complete exploration of the Appellants' invention and its relation to the prior art.

First, as discussed above, Appellants reiterate that DiRienzo is only concerned with medical *images* and not an internal network of *medical diagnostic imaging modalities* and the related *DCCS* used to couple these modalities. Further, despites the Examiner's assertion, Appellants submit that DiRienzo does disclose a network/communication interface and does not implicitly omit obvious elements. Therefore, the Examiner incorrectly concluded that it would have been obvious for one of ordinary skill in the art to include the recited DCCS even though DiRienzo fails to explicitly disclose it. Mainly because DiRienzo discloses everything one of ordinary skill in the art would include in the system taught by DiRienzo, and would not find the recited

DCCS element a necessary and obvious element. Specifically, as recited in the current application, the DCCS element is coupled to a remote service provider and an internal network that includes *a plurality of medical diagnostic imaging modalities*. A simple comparison of the elements will illustrate that it would not have been obvious to include the DCCS as suggested by the Examiner. First, the Examiner stated that the remote service provider is taught in DiRienzo by the CHC (200, FIG. 3). *See* Final Office Action mailed Oct. 19, 2006, pg. 3. The Examiner then stated that DiRienzo teaches *a plurality of medical diagnostic imaging modalities* by disclosing the diagnosis reading site (300, FIG. 3). *See id.* As discussed above, Appellants respectfully disagree with the interpretation that a computer is equivalent to a medical diagnostic imaging modality, but will temporarily proceed under this assumption to illustrate the invalidity of the Examiner's rejection.

Even in light of these questionable assumptions, a review of DiRienzo shows that it does in fact discloses a network/communication interface between the CHC and the diagnostic machine. Specifically, DiRienzo discloses a high speed communications channel (210, FIG. 3) whose only requirement is "that the digital integrity of the image be maintained." *See*, DiRienzo, Col 19, lines 14-24. Additionally, as discussed above, DiRienzo discloses that a courier service may also serve as the network/communication interface. *See id.* Thus, DiRienzo explicitly discloses s network/communication interface and the Examiner is incorrect to conclude that it would have been obvious to include a DCCS element that is neither necessary nor suggested by the reference. Therefore, DiRienzo is not only lacking the recited DCCS element, but is also lacking the suggestion or motivation to include the DCCS element.

Moreover, the DiRienzo reference to a courier service, in fact, teaches away from the recited network of modalities. Indeed, one of the benefits of embodiment of the present invention is to provide an improved data communications topology that couples an internal network of medical diagnostic imaging modalities. *See* Application page 3, lines 20-27. A courier would not provide such an improved data communication

topology. Thus, the Examiner's statement that it would have been obvious for one of ordinary skill to include the DCCS is completely unsupported given that DiRienzo not only fails to disclose the recited elements but also teaches away from the claimed element.

Second, in making the conclusory statement, the Examiner attempted to redefine the recited DCCS element in ambiguous terms (*i.e.*, a network/communication interface) in order to avoid a reasonable interpretation of the claim language in view of the specification. As discussed above, when the specification states the meaning that a term in the claim is intended to have, the claim must be examined using that meaning. Here, the specification discloses that a DCCS includes a central processing unit 86, a communications interface 88, satellite decoder 44, modems 42, additional network interface 90, memory circuitry 92 and additional support components, a backup system 94, one or more peripheral interfaces 96-104, software applications 106, software suite 108, application routines 110, or a combination thereof. *See* Application, page 10, line 8 through page 11, line 32.

Moreover, the Examiner is required to give the broadest *reasonable* interpretation *consistent with the specification*, and not with the Examiner's unsupported speculation. The recited DCCS element is clearly not read on by a transmission line or courier service. Specifically, the DCCS is a control system "for receiving client data from the clients, distributing addressed data to the clients, transmitting client data to a remote service provider and receiving addressed data from the remote service provider." One of ordinary skill in the art would not interpret the DCCS as a simple transmission line or courier service, but instead a control system used to couple *a plurality of medical diagnostic imaging modalities* on an internal network.

To state that it would have been obvious to include the recited DCCS element, as defined in the specification, is simply an unsupported conclusory statement. DiRienzo, as a whole, does not suggest the desirability, and thus the obviousness, of including the

DCCS element because the reference is only concerned with <u>medical images</u> and does not suggest an internal network of <u>medical diagnostic imaging modalities</u>. Likewise, DiRienzo can not possibly suggest coupling modalities via the recited DCCS element when it fails to disclose these modalities. Appellants assert that the Examiner failed to provide any objective evidence on where such motivation or suggestion to include the recited DCCS would come from. Therefore, the Examiner's statement is not only unsupported and conclusory, but is also an unreasonable characterization of what the prior art does teach or suggest. Accordingly, Appellants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness for independent claims 1, 17, 32, 46, and 55, as well as the claims that depend therefrom.

## C. <u>Dependent Claims 10, 13, 16, 18, 26, 29, 31, 34, 42, 43, 45, 49, 52, and 58.</u>

The unsupported conclusory statement discussed above was continuously repeated, without any further reasoning, to reject a number of dependent claims, specifically, dependent claims 10, 13, 26, 29, 30, 42, 43, 45, 49, 52, and 58. For the same reasons discussed above, and additional reasons discussed below, Appellants respectfully submit that the Examiner failed to offer any objective evidence in support of the conclusory statements made in the rejection. Additionally, Appellants further believe that not only did the Examiner mischaracterize the teachings of DiRienzo, but also interpreted the recited claim language in a manner that is inconsistent with the specification. Further, Appellants assert that in making the rejection the Examiner resorted to speculation based on unfounded assumptions and used hindsight reconstuction to pick and choose what appears to be disclosed in DiRienzo, and what might have been obvious to one of ordinary skill in the art. Appellants believe that the following discussion will clearly illustrate the flaws in the Examiner's analysis and further demonstrate that the rejection was based purely on the Examiner's subjective doubt about the patentability of the invention. Additionally, the Examiner presented equally invalid arguments with regard to rejected dependent claims 16, 18, 34, 49 and 52 as discussed below.

# 1. DiRienzo does not teach a DCCS configured to access data from networked clients in accordance with a predetermined data acquisition routine, wherein the data accessed includes operational parameters of the clients.

As discussed above, DiRienzo fails to disclose a network of <u>medical diagnostic</u> <u>imaging modalities</u> and the <u>DCCS</u> element. Furthermore, DiRienzo fails to disclose or render obvious the recited elements of dependent claim 10 (dependent on claims 1 and 9), 26 (dependent on claims 17 and 25), or dependent claim 42 (dependent on claims 32 and 41). The claims recite, in generally similar language, a DCCS element that is configured to access data from networked clients in accordance with a predetermined data acquisition routine, where the data accessed includes <u>operational parameters</u> of the clients.

In making the rejection of dependent claims 10, 26, and 42, the Examiner simply restated the same unsupported and conclusory statement used to reject independent claims 1, 17, and 32. Because the Examiner failed to expand on the conclusory statement, Appellants resubmit the arguments discussed above and thus incorporate these arguments as directly applicable to these dependent claims. Additionally, Appellants reiterate that DiRienzo is only concerned with *medical images* and completely fails to teach or suggest communicating *operational parameters* of medical diagnostic imaging modalities. Moreover, Appellants believe that these rejections make it even more apparent that the Examiner failed to give a complete exploration of the Appellants' invention and its relation to the prior art. The Examiner simply relied on hindsight reconstruction in purporting that the recited element was obvious.

Additionally, dependent claims 18 (dependent on claim 17) and 34 (dependent on claim 32) recite generally similar language to the claims discussed above. The Examiner rejected these claims based on the entire RAMIX system and its ability to store/transmits reports regarding the diagnostic reading performed on the *medical images*. *See*, *e.g.*, Final Office Action mailed Oct. 19, 2006, pg. 8. Once again, the reports disclosed in

DiRienzo are specifically related to <u>medical images</u> and have nothing whatsoever to do with <u>operational data</u> for evaluating the performance of the <u>medical diagnostic imaging</u> <u>modality</u>. See DiRienzo, col. 8, lines 18-37. Further, just because DiRienzo appears to store and transmit reports does not suggest or render obvious the recited claimed element. Specifically, operational data relating to the performance of medical imaging modalities (e.g., servicing, maintenance, analysis, accounting, etc.) is very different from a report containing a physician's diagnosis of a medical image. See, e.g., Application at page 7, lines 1-12. As such, DiRienzo does not disclose or render obvious the claim features of dependent claims 10, 18, 26, 34, and 42. Accordingly, Appellants respectfully request the allowance of claims 10, 18, 26, 34, and 42.

# 2. DiRienzo does not teach or suggest a DCCS element that includes an operator interface and is configured to access data from networked clients in response to an operator request input via the operator interface.

As discussed above, DiRienzo fails to disclose a network of <u>medical diagnostic</u> <u>imaging modalities</u> and the <u>DCCS</u> element. Furthermore, DiRienzo fails to disclose or render obvious the recited elements of dependent claim 13 (dependent on claim 1), 29 (dependent on claim 17), 43 (dependent on claim 32), 49 (dependent on claims 46 and 48), and 58 (dependent on claim 55). The claims recite, in generally similar language, a DCCS that includes an operator interface and is configured to access data from networked clients in response to an operator request input via the operator interface.

In making the rejection of dependent claims 13, 29, 43, 49, and 55, the Examiner simply restated the same unsupported and conclusory statement used to reject independent claims 1, 17, 32, 46, and 55. Because the Examiner failed to expand on the conclusory statement, Appellants resubmit the arguments discussed above and thus incorporate these arguments as directly applicable to these dependent claims.

Additionally, Appellants reiterate that DiRienzo fails to suggest or render obvious the DCCS element and thus can not possibly suggest or teach an *operator interface* 

associated with the DCCS element. Moreover, Appellants believe that these rejection makes it even more apparent that the Examiner failed to give a complete exploration of the Appellants' invention and its relation to the prior art. The Examiner simply relied on hindsight reconstruction in purporting that the DCCS element and related operator interface was obvious. As such, DiRienzo does not disclose or render obvious the claim features of dependent claims 13, 29, 43, 49, and 58. Accordingly, Appellants respectfully request the allowance of claims 13, 29, 43, 49, and 58.

## 3. DiRienzo does not teach or suggest that *all* data communications between selected clients and the remote service provider are routed through the data communications control system.

In rejecting dependent claim 16, the Examiner stated that DiRienzo teaches transmitting data between a remote data provider and a diagnostic reading site connected to a network in order to review data. See Final Office Action mailed Oct. 19, 2006, pg 7. Dependent claim 16 recites that all data communications between selected clients and the remote service provider are routed through the DCCS. First, the rejection fails to address the recited element that all communications between the clients (e.g., medical diagnostic imaging modalities) and the remote service provider are routed through the DCCS. Moreover, DiRienzo actually teaches away from routing all of the data through one gateway. As discussed, DiRienzo discloses that data transmission between the CHC (200, FIG. 3) and the scanning computer (310, FIG. 3) may be done via a transmission line or a courier. In other words, DiRienzo not only fails to disclose the DCCS element, but it also list two possible communication routes between the CHC and scanning computer. Therefore, DiRienzo explicitly teaches away from the recited element and does not disclose that <u>all</u> the data is routed through a DCCS. As such, DiRienzo does not disclose or render obvious the claim features of dependent claim 16. Accordingly, Appellants respectfully request the allowance of claim 16.

# 4. DiRienzo does not teach or suggest a DCCS configured to store and execute communications interface routines interactively with the clients, where the communications interface routines include a web browser routine.

As discussed above, DiRienzo fails to disclose a network of <u>medical diagnostic</u> <u>imaging modalities</u> and the <u>DCCS</u> element. Furthermore, DiRienzo fails to disclose or render obvious the recited elements of dependent claim 31 (dependent on claims 17 and 30) and 45 (dependent on claim 32) The claims recite, in generally similar language, a DCCS configured to store and execute communications interface routines interactively with the clients, where the communications interface routines include a web browser routine.

In making the rejection of dependent claims 31 and 45, the Examiner simply restated the same unsupported and conclusory statement used to reject independent claims 17, and 32. Because the Examiner failed to expand on the conclusory statement, Appellants resubmit the arguments discussed above and thus incorporate these arguments as directly applicable to these dependent claims. Additionally, Appellants reiterate that DiRienzo fails to suggest or render obvious the DCCS element and thus can not possibly suggest or teach a *web browser* include in an interface routine stored and executed by the DCCS. Moreover, Appellants believe that these rejection makes it even more apparent that the Examiner failed to give a complete exploration of the Appellants' invention and its relation to the prior art. Instead, the Examiner simply relied on hindsight reconstruction in purporting that the DCCS element was obvious.

Additionally, dependent claim 52 (dependent on claims 46, 50, and 51) recites similar language to the claims discussed above. The Examiner rejected this claim based on the disclosure of a web browser in DiRienzo. *See, e.g.,* Final Office Action mailed Oct. 20, 2006, pg. 8. Again, DiRienzo relates to medical *images*, and not *medical* diagnostic imaging modalities. The DCCS web browser interface provides for a communication interface with the recited medical diagnostic imaging modalities. The

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web browser disclosed in DiRienzo provides for a physician to download stored *images* from a computer. It does not teach or suggest an interface with a medical diagnostic imaging modality. *See* DiRienzo, col. 14, lines 8-20. Downloading stored *images* by no means discloses a DCCS configured to execute interface routines interactively with <u>a plurality of medical diagnostic imaging modalities</u> via a <u>web browser</u> routine. Appellants reiterate that DiRienzo fails to suggest or render obvious the DCCS element and the medical diagnostic imaging modalities. Therefore, it can not possibly suggest or teach a web browser routine associated with the recited DCCS. As such, DiRienzo does not disclose or render obvious the claim features of dependent claims 31, 45, and 52. Accordingly, Appellants respectfully request the allowance of claims 31, 45, and 52.

### D. Request Withdrawal of Rejection

In view of these reasons, Appellants respectfully request that the Board direct the Examiner to withdraw the rejection of claims 1-3 and 5-60 under U.S.C. § 103(a) and to allow the claims.

Respectfully submitted,

Date: September 14, 2007 /Patrick S. Yoder/\_

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## 8. **APPENDIX OF CLAIMS ON APPEAL**

### **Listing of Claims:**

1. A medical facility data communications system, the system comprising: an internal data communications network;

a plurality of clients coupled to the internal network and uniquely addressed on the internal network, the clients include a plurality of medical diagnostic imaging modalities configured to produce image data; and

a data communications control system coupled to the internal network for receiving client data from the clients, transmitting client data to a remote service provider, receiving addressed data from the remote service provider, and distributing the addressed data to the clients.

- 2. The system of claim 1, wherein the internal data communications network includes at least one local area network.
- 3. The system of claim 2, wherein the internal data communications network includes a high speed Ethernet network.
- 5. The system of claim 1, wherein the plurality of medical diagnostic imaging modalities are selected from a group including medical resonance imaging system, computed tomography systems, ultrasound systems, and x-ray systems.
- 6. The system of claim 1, wherein the clients include a hospital information system.
- 7. The system of claim 1, wherein the clients include a radiology department information system.

- 8. The system of claim 1, wherein the clients include a picture archiving and communication system.
- 9. The system of claim 1, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.
- 10. The system of claim 9, wherein the data accessed includes operational parameters of the clients.
- 11. The system of claim 9, wherein at least one of the clients is a mobile client, and wherein the data accessed includes location of at least the mobile client.
- 12. The system of claim 11, wherein the location of the at least one mobile client is accessed in response to connection of the at least one mobile client to the internal network.
- 13. The system of claim 1, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.
- 14. The system of claim 1, further comprising an external network interface for exchanging client data and addressed data between the data communications control system and the remote service provider.
- 15. The system of claim 14, wherein the external network interface includes an interface for at least two different data communications media.

- 16. The system of claim 1, wherein all data communications between selected clients and the remote service provider are routed through the data communications control system.
- 17. A data communications system for a medical diagnostic facility, the system comprising:

a plurality of clients linked to an internal network, the clients including a plurality of medical diagnostic imaging modalities;

a data communications control system linked to the internal network for receiving client data from the clients, distributing addressed data to the clients, transmitting client data to a remote service provider and receiving addressed data from the remote service provider; and

an external network interface coupled to the data communications control system for transmitting the client data to the remote service provider and for receiving the addressed data from the remote service provider.

- 18. The system of claim 17, wherein the client data includes operational data for evaluating performance of the plurality of medical diagnostic imaging modalities.
- 19. The system of claim 17, wherein the internal network is a local area network and the external network is a wide area network.
- 20. The system of claim 19, wherein the internal network is an Ethernet network.
- 21. The system of claim 19, wherein the wide area network includes the Internet.

- 22. The system of claim 17, wherein the clients include a hospital information system.
- 23. The system of claim 17, wherein the clients include a radiology department information system.
- 24. The system of claim 17, wherein the clients include a picture archiving and communication system.
- 25. The system of claim 17, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.
- 26. The system of claim 25, wherein the data accessed includes operational parameters of the clients.
- 27. The system of claim 25, wherein at least one of the clients is a mobile client, and wherein the data accessed includes location of at least the mobile client.
- 28. The system of claim 27, wherein the location of the at least one mobile client is accessed in response to connection of the at least one mobile client to the internal network.
- 29. The system of claim 17, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.
- 30. The system of claim 17, wherein the data communications control system is configured to store and execute communications interface routines interactively with the clients.

- 31. The system of claim 30, wherein the communications interface routines include a web browser routine.
- 32. A communications system for a medical diagnostic facility, the system comprising:

an internal network;

a plurality of clients configured for connection to the network for transmission of client data and for receipt of addressed data, the clients including a physically mobile client and a plurality of medical diagnostic imaging modalities; and

a data communication control system coupled to the internal network and to an external network for communicating client data and addressed data between the clients and a remote service provider, the data communications control system being configured to automatically access client data including data indicative of a location of the mobile client.

- 33. The system of claim 32, wherein the control system is configured to detect the location of the mobile client upon connection of the mobile client to the network.
- 34. The system of claim 32, wherein the client data includes operational data for evaluating performance of the plurality of medical diagnostic imaging modalities.
- 35. The system of claim 32, wherein the internal network is a local area network and the external network is a wide area network.
- 36. The system of claim 32, wherein the internal network is an Ethernet network.
- 37. The system of claim 36, wherein the wide area network includes the Internet.

- 38. The system of claim 32, wherein the clients include a hospital information system.
- 39. The system of claim 32, wherein the clients include a radiology department information system.
- 40. The system of claim 32, wherein the clients include a picture archiving and communication system.
- 41. The system of claim 32, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.
- 42. The system of claim 41, wherein the data accessed includes operational parameters of the clients.
- 43. The system of claim 32, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.
- 44. The system of claim 32, wherein the data communications control system is configured to store and execute communications interface routines interactively with the clients.
- 45. The system of claim 32, wherein the communications interface routines include a web browser routine.

- 46. A method for communicating data in a medical diagnostic facility, the method comprising the steps of:
  - (a) transmitting client data from a plurality of networked clients to a data communications control system via an internal network, the clients including a plurality of medical diagnostic modalities;
  - (b) processing the client data in the data communications control system;
  - (c) transmitting at least a portion of the client data from the data communications control system to a remote service provider via an external network.
- 47. The method of claim 46, comprising the further steps of receiving addressed data from the remote service provider via the data communications control system, and distributing the addressed data to an intended client via the internal network.
- 48. The method of claim 46, wherein the client data is transmitted to the data communications control system in response to a request from the control system.
- 49. The method of claim 48, wherein the control system includes an operator interface, and wherein the request is generated via the operator interface.
- 50. The method of claim 46, wherein the client data is transmitted to the control system in a transmission created by operator intervention at the client.
- 51. The method of claim 50, wherein the transmission is created via an interface routine executed interactively by the control system and client.
- 52. The method of claim 51, wherein the interface routine includes a web browser application.

- 53. The method of claim 46, including the step of storing client data for access by the control system.
- 54. The method of claim 46, including the step of logging communications between the clients and the control system.
- 55. A method for managing data communications in a medical diagnostic facility, the method comprising the steps of:
  - (a) coupling a plurality of clients to an internal network, the clients including at least one physically mobile client and a plurality of medical diagnostic imaging modalities;
  - (b) transmitting client data from the clients to a data communications control system, the client data including at least data indicative of a location of the at least one mobile client; and
  - (c) storing the client data.
- 56. The method of claim 55, wherein the client data indicative of the location of the at least one mobile client is transmitted upon connection of the at least one mobile client to the network.
- 57. The method of claim 55, comprising the further step of accessing client data representative of performance of the clients.
- 58. The method of claim 55, wherein the control system includes an operator interface, and wherein client data is accessed via the internal network in response to operator intervention via the interface.
- 59. The method of claim 55, comprising the further step of transmitting at least a portion of the client data to a remote service provider via an external network.

60. The method of claim 55, comprising the further steps of receiving addressed data at the control system via an external network, and distributing the addressed data to an intended client.

## 9. **APPENDIX OF EVIDENCE**

None.

## 10. **APPENDIX OF RELATED PROCEEDINGS**

None.